



TO THE
ROYAL SOCIETY.



After my Address to our Great Founder and Patron, I could not but think my self oblig'd, in consideration of those many Ingagements you have laid upon me, to offer these my poor Labours to this MOST ILLUSTRIOUS ASSEMBLY. YOU have been pleas'd formerly to accept of these rude Draughts. I have since added to them some Descriptions, and some Conjectures of my own. And therefore, together with YOUR Acceptance, I must also beg YOUR pardon. The Rules YOU have prescrib'd YOUR selves in YOUR Philosophical Progress do seem the best that have ever yet been practis'd. And particularly that of avoiding Dogmatizing, and the espousal of any Hypothesis not sufficiently grounded and confirm'd by Experiments. This way seems the most excellent, and may preserve both Philosophy and Natural History from its former Corruptions. In saying which, I may seem to condemn my own Course in this Treatise; in which there may perhaps be some Expressions, which may seem more positive than YOUR Prescriptions will permit: And though I desire to have them understood only as Conjectures and Quæries (which YOUR Method does not altogether disallow) yet if even in those I have exceeded, 'tis fit that I should declare, that it was not done by YOUR Directions. For it is most unreasonable, that YOU should undergo the imputation of the faults of my Conjectures, seeing YOU can receive so small advantage of reputation by the slight Observations of

YOUR most humble and
most faithful Servant

ROBERT HOOKE.



THE
PREFACE.



It is the great prerogative of Mankind above other Creatures, that we are not only able to behold the works of Nature, or barely to sustain our lives by them, but we have also the power of considering, comparing, altering, assisting, and improving them to various uses. And as this is the peculiar privilege of humane Nature in general, so is it capable of being so far advanced by the helps of Art, and Experience, as to make some Men excel others in their Observations, and Deductions, almost as much as they do Beasts. By the addition of such artificial Instruments and methods, there may be, in some manner, a reparation made for the mischiefs, and imperfection, mankind has drawn upon it self, by negligence, and intemperance, and a wilful and superstitious deserting the Prescripts and Rules of Nature, whereby every man, both from a deriv'd corruption, innate and born with him, and from his breeding and converse with men, is very subject to slip into all sorts of errors.

The only way which now remains for us to recover some degree of those former perfections, seems to be, by rectifying the operations of the Sense, the Memory, and Reason, since upon the evidence, the strength, the integrity, and the right correspondence of all these, all the light, by which our actions are to be guided, is to be renewed, and all our command over things is to be establish'd.

It is therefore most worthy of our consideration, to recollect their several defects, that so we may the better understand how to supply them, and by what assistances we may enlarge their power, and secure them in performing their particular duties.

As for the actions of our Senses, we cannot but observe them to be in
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